with subclinical leishmaniasis, and 100 seronegative healthy controls were measured by enzyme-linked immunosorbent assay. Genotyping of CD 28 gene polymorphism was performed by polymerase chain reaction based allotyping method using allele-specific primers for C or T at intron 3 position +17 in three groups.

Results: The frequency of CC genotype was significantly higher in subclinical VL patients (42.4%) than active VL group (27.3%) and healthy controls (16%) ($p < 0.001$). Also, the frequency of allele C among subclinical VL group (57.6%) was significantly higher than active VL (40.9%) and control groups (34%) ($p = 0.003$). No significant differences were observed between the plasma levels of sCD 28 in three groups.

Conclusion: Our findings suggest that the CD 28 gene may have significant role in the protection of active VL in the Iranian population.

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65.016

Proteases Secreted by the Infective Larvae of *Toxocara canis* and Partial Purification of a 50 kDa Protease

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Toxocara canis is a nematode parasite of dogs, a causative agent for human toxocariasis. It has become a major zoono-parasitic infection in Sri Lanka. Infective second-stage larvae of *T.canis* secrete proteolytic enzymes which are thought to be instrumental in their tissue-migration process. Therefore, this study aimed at identifying proteolytic enzymes which are involved in the metabolic pathway of these parasites and thereby targeting a specific enzyme for the control of the infection. Proteolytic activity of these larvae during culture in vitro was determined by gelatin -zymography, pH optimum and substrate and inhibitor specificity. A partial purification of a 50 kDa protease was done using DEAE-anion exchange chromatography which was characterized for its optimum pH, temperature and inhibitor sensitivity.

Excretory-secretory products of infective larvae showed proteolytic activity as seven bands in gelatin zymography with their molecular weights lie between 175 kDa to 20 kDa. The optimal pH value for these protease activities was observed between pH 5.5 to 6.5 and activity was optimum in albumin over gelatin and casein. These activities were inhibited by serine, cystein and metallo protease inhibitors. 50 kDa protease was partially purified by using DEAE-anion exchange chromatography and its activity was optimum in pH 8.5 at 70 °C. This protease activity was inhibited by serine, cystein and metalo protease inhibitors.

Proteases secreted by *T.canis* infective larvae exhibit diversity in classes of proteases, based on the differential migration in polyacrylamide gels containing gelatin. This result clearly demonstrates the heterogeneity of larval proteases so might be involved in different functions during the larval migration. Partially purified 50 kDa protease might involve in a specific function by which, inhibition of this enzymes activity may arrest the activity of infective larvae. Therefore, this enzyme could be target candidate to control of toxocariasis by inhibition with chemical or immunological methods.

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65.017

Seropervalence Toxocariasis in Children Aged 2—15 Referring to the Hospitals and Medical Centers in Zanjan, Iran During the Year 2007

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Keywords: Toxocariasis; VLM; OLM; ELISA; Zanjan

Background: Toxocariasis is a cosmopolitan disease with a high prevalence among children. Oral entrance of the parasite eggs into the body and release of the larva in intestine and their entering to bloodstream results in visceral larva migrans (VLM) and ocular larva migrans (OLM). This study is a aimed to study the amount of serum IgG against Toxocara in children aged 2—15 who referred to the hospitals and health centers of Zanjan province in 2007.

Method: In this cross-sectional study, blood samples from 810 children aged 2—15 referring to the medical centers and hospitals were collected. The presence of IgG against stage 2 larva was detected by ELISA. Data related to age and degree, education of parents and children, history of illnesses, washing hands and contact with cats and dogs were collected through questionnaires. The collected data were analyzed by SPSS 11.5 for windows package using Chi-square test.

Results: The overall seroprevalence of Toxocariasis in children aged 2—15 years, was found to be 2.7% (22 cases). The titer of IgG in rural and urban population was 4.4% and 1.6% respectively. Contact with cats and infectious were statistically significant. No significant relation was found between the infectious and the level of education of children and their parents, hand washing, contact with dogs and history of disease and location ($P > 0.05$).

Conclusion: This study shows that Toxocara exists in Zanjan, and can effect children aged 2—15. Thus, informing parents and children about the risk factors of infection transmission and related complications is recommended. Moreover, we should draw physician attention to the disease and symptoms that are similar to other infections diseases.

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65.018

The Identification of Cryptosporidium Species by PCR-RFLP Analysis of the 18s rRNA Gene

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Background: Cryptosporidium is an important protozoa that cause diarrheal illness in humans and animals.In immuoncompetent individuals,infection is usually self-